

IN THE CLAIMS:

1. Motor vehicle having at least one radiator which, on an air input side, has a first air guiding duct with a cooling-air inlet opening and, on an air output side, has a second air guiding duct with a cooling-air outlet opening,

wherein at least one radiator is accommodated in a supporting frame fastened to an adjoining body, and wherein an air guiding element is constructed in one piece with the supporting frame, which air guiding element, together with the radiator, forms at least one of the first and second air guiding ducts.

2. Motor vehicle according to claim 1, wherein the air guiding element connected with the supporting frame, together with a rearward side of the radiator, forms the second air guiding duct connected on the output side.

3. Motor vehicle according to claim 1, wherein the supporting frame is composed of a frame-shaped top part and a transversely extending bottom part profiled in a rail shape.

4. Motor vehicle according to claim 3, wherein the top part comprises an upper cross member and two upright, downward-projecting exterior side cheeks.

5. Motor vehicle according to claim 4, wherein the air guiding element is constructed in one piece with the top part of the supporting frame such that the

transversely extending air guiding element is connected to both exterior side cheeks and to a rearward edge of the upper cross member.

6. Motor vehicle according to claim 3, wherein the top part is made of a suitable plastic material, such as PP GF30, PA 6.6, or the like.

7. Motor vehicle according to claim 4, wherein the top part is made of a suitable plastic material, such as PP GF30, PA 6.6, or the like.

8. Motor vehicle according to claim 5, wherein the top part is made of a suitable plastic material, such as PP GF30, PA 6.6, or the like.

9. Motor vehicle according to claim 3, wherein the top part is made of a light metal diecasting.

10. Motor vehicle according to claim 4, wherein the top part is made of a light metal diecasting.

11. Motor vehicle according to claim 5, wherein the top part is made of a light metal diecasting.

12. Motor vehicle according to claim 3, wherein the bottom part of the supporting frame is made of steel plate or aluminum sheet metal.

13. Motor vehicle according to claim 4, wherein the bottom part of the supporting frame is made of steel plate or aluminum sheet metal

14. Motor vehicle according to claim 5, wherein the bottom part of the supporting frame is made of steel plate or aluminum sheet metal.

15. Motor vehicle according to claim 6, wherein the bottom part of the supporting frame is made of steel plate or aluminum sheet metal.

16. Motor vehicle according to claim 9, wherein the bottom part of the supporting frame is made of steel plate or aluminum sheet metal.

17. Motor vehicle according to claim 3, wherein fastening links for the body-side holding of the supporting frame are constructed on the top part.

18. Motor vehicle according to claim 4, wherein fastening links for the body-side holding of the supporting frame are constructed on the top part.

19. Motor vehicle according to claim 5, wherein fastening links for the body-side holding of the supporting frame are constructed on the top part.

20. Motor vehicle according to claim 3, wherein as a result of the arrangement of intermediate pieces between the top part and the bottom part, radiators of different heights can be accommodated in the supporting frame.

21. Motor vehicle according to claim 5, wherein as a result of the arrangement of intermediate pieces between the top part and the bottom part, radiators of different heights can be accommodated in the supporting frame.

22. A radiator assembly for a motor vehicle comprising:

a radiator,

an air inlet guiding duct at a first side of the radiator,

an air outlet guiding duct at a second side of the radiator, and

a supporting frame for the radiator, which supporting frame is fastenable to vehicle body parts,

wherein an air guiding element is constructed in one piece with the supporting frame, which air guiding element, together with the radiator, forms at least one of the first and second air guiding ducts.

23. A radiator assembly according to claim 22, wherein the air guiding element connected with the supporting frame, together with a rearward side of the radiator, forms the second air guiding duct connected on the output side.

24. A radiator assembly according to claim 22, wherein the supporting frame is composed of a frame-shaped top part and a transversely extending bottom part profiled in a rail shape.

25. A radiator assembly according to claim 24, wherein the top part comprises an upper cross member and two upright, downward-projecting extension side cheeks.

26. A radiator assembly according to claim 25, wherein the air guiding element is constructed in one piece with the top part of the supporting frame such that the transversely extending air guiding element is connected to both exterior side cheeks and to a rearward edge of the upper cross member.

27. A radiator assembly according to claim 26, wherein fastening links for the body-side holding of the supporting frame are constructed on the top part.

28. A method of making a radiator assembly for a motor vehicle which includes:

a radiator,

an air inlet guiding duct at a first side of the radiator,

an air outlet guiding duct at a second side of the radiator, and
a supporting frame for the radiator, which supporting frame is fastenable to vehicle body parts,
wherein an air guiding element is constructed in one piece with the supporting frame, which air guiding element, together with the radiator, forms at least one of the first and second air guiding ducts,
said method comprising:
connecting said supporting frame to adjoining vehicle body parts,
inserting said radiator into said supporting frame from aside of said radiator facing away from the air guiding element, and
attaching the supporting frame and radiator together.

29. A method according to claim 28, wherein the supporting frame is composed of a frame-shaped top part and a transversely extending bottom part profiled in a rail shape.

30. A method according to claim 29, wherein the top part comprises an upper cross member and two upright, downward-projecting extension side cheeks.

31. A method according to claim 30, wherein the air guiding element is constructed in one piece with the top part of the supporting frame such that the transversely

extending air guiding element is connected to both exterior side cheeks and to a rearward edge of the upper cross member.

32. A method according to claim 31, wherein fastening links for the body-side holding of the supporting frame are constructed on the top part.

33. A method according to claim 29, wherein motor vehicle according to claim 5, wherein fastening links for the body-side holding of the supporting frame are constructed on the top part.